

whole are variable in size and development. The vesicles are considerably larger than in *P. cristata*, and the ribs are toothed.

When dry, this species, like *P. cristata*, becomes curved in a falcate manner, and the pinnæ are frequently laid to one side, so that it assumes a good deal of the form of an ostrich plume, in reference to which I have given it the above specific name.

Bay of San Francisco.

#### EXPLANATION OF THE PLATES.

##### PLATE XI.

Fig. 1. *Sertularia tricuspidata*, natural size: *a*, portion of same, magnified.

Fig. 2. *Sertularia labrata*, nat. size: *a*, portion of same, magnified.

Fig. 3. *Sertularia corniculata*, nat. size: *a*, portion of same, magnified.

##### PLATE XII.

Fig. 1. *Plumularia gracilis*, nat. size: *a* & *b*, portions of same, magnified.

Fig. 2. *Plumularia struthionides*, nat. size: *a*, portion of stem, magnified; *b*, vesicle, magnified; *c*, portion of pinna, magnified; *d* & *e*, cells, more highly magnified.

#### XXIX.—On Additions to the Madeiran Coleoptera.

By T. VERNON WOLLASTON, M.A., F.L.S.

[Continued from p. 222.]

Fam. Colydiadæ.

Genus TARPHIUS.

(Germar) Erichs., Nat. der Ins. Deutschl. iii. 256 (1848).

*Tarphius angusticollis*, n. sp.

*T. subrotundato-ovatus*, subnitidus, niger; prothorace angusto, antice et postice attenuato, angulis anticis valde acutis porrectis, granulis crebris magnis obtusissimis obsito; elytris rotundatis convexis concoloribus profunde seriatim punctatis, interstitiis alternis leviter elevatis interruptis, nodos distinctos (plus minus aureo-setosos) efformantibus; femoribus tibiisque nigrescenti-piceis, tarsis antennisque picescenti-ferrugineis, harum capitulo sensim majusculo.

Long. corp. lin.  $1\frac{1}{2}$ — $1\frac{2}{3}$ .

*Habitat* locos editiores sylvaticos Maderæ, in regione Fanalensi a Dom. Bewicke æstate A.D. 1859 detectus.

*T.* roundish-ovate, deep-black, almost free from scales, and a little shining. *Head* and *prothorax* beset with very close, large, and exceedingly obtuse granules: the *latter* nearly unchanneled, altogether narrow, but attenuated before and behind (the sides being suddenly expanded about the middle), and with the anterior angles even more acute and prominent than is the case in

the *Tarphii* generally. *Elytra* concolorous, rounded and convex, deeply seriate-punctate, and without transverse wrinkles,—the punctures being large, regular, and distinct; the alternate interstices a little raised and much interrupted, forming small but very conspicuous nodules in the usual positions, which are more or less clothed with yellowish, or golden, setæ. *Femora* and *tibiæ* blackish-piceous; the *tarsi* and *antennæ* (the latter of which have their club, especially the apical joint, a little larger and more abrupt than in the generality of the *Tarphii*) piceo-ferruginous.

Eight specimens of the present very distinct *Tarphius* were captured by Mr. Bewicke in Madeira proper,—in the upland region of the Fanal (more than 4000 feet above the sea), during the summer of 1859. Although with many characters which belong to neither of them, it is in some respects intermediate between the *T. sylvicola* and *Lauri*, combining the dark hue, rounded elytra, and deep sculpture of the former, with the posteriorly constricted (but altogether narrower, and otherwise different) prothorax of the latter. Nevertheless, in its very distinct nodules (which are more or less sparingly clothed with golden setæ), and its rather larger antennal club, it recedes, *inter alia*, from them both. I have adopted the above trivial name in allusion to the general narrowness of its prothorax.

#### Genus AGLENUS.

Erichson, Nat. der Ins. Deutsch. iii. 285 (1848).

The genera *Aglenus* and *Anommatus* are both of them additions to the Madeiran fauna; and in their small, glabrous, shining bodies, and obsolete eyes, as well as in their general aspect and habits, they have much in common. Still I believe, in reality, with M. Jacquelin Duval (*vide* Gen. des Col. d'Europe, ii. 242), that, in spite of their resemblance to a certain extent, they belong to distinct families; and hence I would record the former of them only as a member of the *Colydiadæ*. Apart from their specific differences, which are very conspicuous, *Aglenus* may be known from *Anommatus* by, *inter alia*, its distinctly 11-jointed antennæ, with their loosely-connected triarticulate club, by its slenderer limbs, and its evidently tetramerous feet. They are both of them found beneath vegetable substances,—*Aglenus*, however, preferring comparatively dry refuse, like that which accumulates round the edges of hay- and corn-stacks (to which it is much attached), and sometimes occurring even beneath bones; whilst *Anommatus* is more commonly found under logs of moist rotting timber on the damp ground.

*Aglenus brunneus*, Gyll.

*A. fusiformi-cylindricus*, rufo-castaneus, nitidus, glaber; capite prothoraceque distincte, elytris leviter et minus crebre punctatis.

Long. corp. lin.  $\frac{3}{4}$ — $\frac{7}{8}$ .

*Habitat* in locis inferioribus Maderæ, a Dom. E. Leacock prope urbem Funchalensem repertus.

*Hypophlæus? brunneus*, Gyll., Ins. Suec. iii. 711 (1813).

*Cerylon obsoletum*, Steph., Ill., Brit. Ent. iii. 98 (1830).

*Anommatus obsoletum*, Shuck., Brit. Col. Del. 27, pl. 33. f. 2 (1840).

*Aglenus brunneus*, Erichs., Nat. der Ins. Deutschl. iii. 285 (1848).

*A. fusiform-cylindric*, being a little constricted at the junction of the prothorax and elytra, reddish-chestnut, bright, and glabrous. *Head* and *prothorax* closely and distinctly punctured, the punctures having a tendency to become confluent. *Elytra* much emarginated at their base, causing the shoulders to appear advanced; less deeply, and not quite so closely, punctured as the head and prothorax,—the punctures with scarcely any tendency to be disposed in rows. *Limbs* a shade paler than the rest of the surface.

The European *A. brunneus* was first detected in Madeira by Mr. Edmund Leacock (and subsequently by myself in the same locality), beneath some bones and logs of wood in a small out-house, in his garden at the Quinta de São João, near Funchal; and it was shortly afterwards captured by Mr. Bewicke amongst vegetable refuse at the Palmeira.

## Genus PROSTHECA, nov. gen.

*Corpus* parvum, angustum, lineare, asperatum: *capite* porrecto: *prothorace* longiusculo trapeziformi, ad latera subserrato, antice leviter emarginato: *scutello* minuto (ægre observando): *alis* (nisi fallor) obsoletis: *abdomine* e segmentis sex (?) composito (apicali minutissimo vix perspicuo). *Antennæ* prothoracis fere longitudine, rectæ, articulis 1<sup>mo</sup> et 2<sup>do</sup> sat magnis crassiusculis (hoc illo vix minore), 3<sup>ti</sup>o usque ad nonum multo brevioribus minoribus paulo angustioribus inter se æqualibus, 10<sup>mo</sup> et 11<sup>mo</sup> capitulum magnum solidum rotundatum valde abruptum biarticulatum efficientibus, inter se arcte applicatis (sutura vix observanda). *Labrum* membranaceum antice vix solidius, quadratum (margine antico integro, angulis vix rotundatis ciliatis). *Mandibulæ* validæ corneæ triangulares, intus haud dentatæ, sed circa medium leviter incisæ et membrana parva instructæ. *Maxillæ* bilobæ: *lobo externo* breviusculo subrecto, apice subito truncato et dense barbato; *interno* paulo breviori minore, apicem versus dense barbato sed vix uncinato. *Palpi maxillares* articulis 1<sup>mo</sup>, 2<sup>do</sup>, et 3<sup>ti</sup>o longitudine subæqualibus, 1<sup>mo</sup> leviter flexuoso, 2<sup>do</sup> et 3<sup>ti</sup>o crassioribus (illo subclavato, hoc subgloboso), ultimo magno elongato incrassato ovali apice vix acuminato; *labiales* e scapis ligulæ connatis surgentes, articulis 1<sup>mo</sup> et 2<sup>do</sup>

subæqualibus (illo subflexuoso, hoc paulo crassiore subclavato), ultimo magno (ut in palpis maxillaribus). *Mentum* magnum transverso-quadratum, antice vix angustatum. *Ligula* magna sat robusta subquadrata, apice integra ciliata. *Pedes* validi subcontractiles, basi vix distantes: *femoribus* apicem versus subclavatis: *tibiis* bicalcaratis, extus (præsertim *anticis*) irregulariter erosis, aut potius subseratis: *tarsis* 4-articulatis, articulis tribus baseos inter se subæqualibus, 4<sup>to</sup> valde elongato flexuoso subclavato, *unguiculis* simplicibus munito.

A πρὸς et τῆθημι, [sc. faunæ] accessio.

The small insect from which the above characters have been drawn is hitherto unique; nevertheless, I have fortunately succeeded, in my dissection of it, in securing all the parts of its mouth, so that I can have no hesitation as to its affinities. Its entire structure and quadriarticulate feet leave no doubt whatsoever, on my mind, that it is rightly referred to the *Colydiadæ*; and I believe that its nearest allies are the European genera *Pycnomerus* and *Xylolæmus*. Indeed with the former of these it has so much in common that I at first thought it might be almost associated with it; nevertheless, its more abruptly clavated antennæ and different mandibles (which are entire at the apex, and without the deep incision towards their base behind), in conjunction with its much *squarer* (or more angulated) labrum, mentum, and ligula, will, apart from minor points, prevent its fusion into *Pycnomerus*; whilst from *Xylolæmus* (which it much resembles in its trapeziform, margined, and laterally crenulated prothorax), its undentated mandibles, and the somewhat differently proportioned joints of its antennæ and palpi will (as I judge from the description), *inter alia*, readily separate it.

*Prostheca aspera*, n. sp.

*P. linearis*, fusco-ferruginea subopaca; capite prothoraceque rugosis, tuberculatis et setulis paucis valde distantibus obsitis; hoc fere æquali, postice angustiore, ad latera oblique recto, angulis anticis porrectis paulo explanatis subrecurvis; elytris obsoletissime subseriatim punctatis, interstitiis subcrenato-costatis et setulis longitudinaliter obsitis; antennis pedibusque vix pallidioribus.

Long. corp. lin. 1.

*Habitat* Maderam, a Dom. Bewicke nuper communicata.

*P.* narrow, linear, elongate, dull brownish-ferruginous, and nearly opaque. *Head* and *prothorax* much roughened, and beset with large but not very elevated tubercles, sprinkled with short remote setæ: the *former* subquadrate; the *latter* elongated, slightly narrowed behind, with the sides nearly straight (but oblique) and margined, and with the anterior angles thickened, porrected, and slightly recurved. *Elytra* with very shallow, and almost obsolete, punctures arranged in longitudinal rows, and

with the interstices apparently [for the sculpture is somewhat obscure] subcostate and crenulated; and with longitudinal rows of short distant setæ down each. *Limbs* a little paler than the rest of the surface.

The discovery of this curious beetle is due to the indefatigable researches of Mr. Bewicke, who captured a single specimen of it in his garden at the Palmeira, above Funchal, amongst some dried stems of the *Euphorbia piscatoria* which he had brought several months before from Porto Novo, on the eastern coast. Whether, therefore, it was transported to Funchal, along with the numerous other Coleoptera which inhabit the stems of the Euphorbias, or whether its appearance amongst them was merely accidental, it is impossible at present to decide. Be this, however, as it may, there is, at any rate, no reason for suspecting that the insect is otherwise than indigenous.

#### Genus LYCTUS.

Fabricius, Ent. Syst. i. ii. 502 (1792).

#### *Lyctus Leacocianus*, n. sp.

*L. cylindricus*, parce pubescens, niger; capite prothoraceque crebre et profunde punctatis, hoc subquadrato, angulis anticis haud productis sed posticis paulo acuminatis; elytris leviter sub-biseriatim punctatis (punctis elongatis angustis), sutura interstitiisque alternis obsoletissime elevatis; antennis (robustis) pedibusque piceis.

Long. corp. lin.  $2\frac{1}{8}$ .

*Habitat* Maderam australem, prope urbem Funchalensem a Dom. E. Leacock repertus, cujus in honorem nomen triviale proposui.

*L. linear* and cylindrical, but rather broader than the *L. brunneus*, also of a darker hue (being nearly black), and somewhat less densely clothed with decumbent fulvous pubescence. *Head* and *prothorax* a little more coarsely punctured: the *latter* more strictly quadrate—the anterior angles being rounded-off, and not downwardly produced as in that species; but with the extreme hinder angles more acute, or prominent; the sides not perceptibly crenulated, even beneath the microscope; the disk rather more even and convex, but nevertheless with the longitudinal depression more lengthened, or converted into a wide dorsal channel. *Elytra* more closely and distinctly punctulated than in the *L. brunneus*, the punctures being narrow and elongated (like broken striæ), with a tendency to be arranged in double longitudinal rows, and both smaller and more dense (as well as more irregular) towards the suture than towards the margin; the suture and alternate interstices obsoletely raised. *Limbs* dark-piceous; the *antennæ* more robust than those of the *L. brunneus*.

The present important addition to the fauna is due to the researches of Mr. Edmund Leacock, who detected the single specimen from which the above comparative description has been compiled in his garden at the Quinta de São João, near Funchal. Its dark hue and totally different prothorax, in conjunction with its comparatively robust antennæ and curious elytral sculpture, will, apart from minor differences, at once separate it from its ally the *L. brunneus*. I have named it after its discoverer, whose successful labours have so often augmented the Madeiran Catalogue.

Fam. *Lathridiadae*.

Genus *ANOMMATUS*.

Wesmaël, Bull. de l'Acad. de Bruxell. ii. 339, tab. 4 (1836).

The little *Anommatus 12-striatus* bears, as already stated, so strong a *primâ facie* resemblance to *Aglenus* that it has been universally, with one exception, placed alongside that genus, amongst the *Colydiadae*. Nevertheless, the various authors who have thus tacitly acknowledged its affinities seem merely to have followed blindly in the wake of Erichson, whose description of its structural details was, as M. Jacquelin Duval has recently well remarked, both loose and incorrect; and, after a very careful dissection of it, I agree with M. Duval that it should be undoubtedly assigned to the *Lathridiadae*. True it is that its robust limbs and abruptly clavated antennæ are not in accordance with the normal members of that family; but then, on the other hand, neither are they universally indicative of the *Colydini*; whilst even amongst the *Lathridiadae* such genera as *Cholovocera* and *Merophysia* afford us an abundant precedent for the supposition that the terminal joints of the antennæ may sometimes, in that group, become absolutely lost by uniting into a densely compact mass. Then, with respect to the tarsi of *Anommatus*, having mounted them in Canada balsam for microscopic observation, I believe that M. Jacquelin Duval is perfectly right in regarding them as triarticulate, instead of quadriarticulate, as stated by Erichson. The basal joint is certainly a little constricted on its under side, but even polarized light will not show the merest rudiment of a suture; and I have not the slightest hesitation, therefore, in concluding it to be a single joint, and the whole foot to be, consequently, triarticulate—which is almost universally the case with the *Lathridiadae*. The antennæ are composed of only nine joints besides the club,—which latter is extremely compact, and with no annular traces on it whatso-

ever, so far as I can detect: hence, although we *assume* that the two ultimate joints are fused into it, we must practically regard the entire number [*i.e.* the recognizable number] as diminished, from the normal standard,—which is, likewise, perfectly in accordance with the generality of the *Lathridiadae*, in which the recognizable antennal joints vary from 8 to 11. Of these joints, the 1st and the 2nd are in *Anommatus* large and robust; the 3rd very much more slender and of almost the same length as the 2nd; the 4th, 5th, 6th, 7th, 8th, and 9th extremely short, but gradually becoming broader; and then follows the immense subglobose club, which must be regarded as swallowing up the remaining two articulations. I believe, all points considered, that *Anommatus* is more nearly akin to the (likewise blind) *Langelandia anophthalma* than to almost any other, perhaps, of our European genera; and, in the Madeiran Catalogue, I would place it at the commencement of the *Lathridiadae*, near to *Cholovocera*.

*Anommatus 12-striatus*, Müll.

*A. parallelo-oblongus*, testaceus, nitidus, glaber; prothorace valde profunde sed remote punctato (punctis maximis, in dorso subseriatim); elytris profunde punctato-striatis.

Long. corp. lin.  $\frac{2}{3}$ .

*Habitat* Maderam, sub truncis arborum prolapsis, rarissimus.

*Lyctus 12-striatus*, Müll., in Germ. Mag. iv. 190 (1821).

*Anommatus terricola*, Wesm., Bull. Acad. Brux. ii. 339. t. 4 (1836).

— *12-striatus*, Erichs., Nat. der Ins. Deutschl. iii. 286 (1848).

— —, Redt., Fauna Austr. 181 (1849).

*A. parallel-oblong*, being smaller, more linear, and less convex than the *Aglenus brunneus*, pale-testaceous, very bright, and glabrous. *Head* sparingly, but not very deeply punctured. *Prothorax*, rather widened anteriorly, very deeply and remotely punctured,—the punctures being very large, and on either side of the central line (which is just perceptibly keeled) with a tendency to be disposed in rows. *Elytra* deeply striate-punctate (the punctures being there also very large). *Limbs* a shade paler than the rest of the surface.

Detected by myself, in tolerable abundance, beneath the trunk of a felled cherry-tree which was lying on the damp ground at the bottom of the Curral das Freiras, whilst encamped there, with the Rev. R. T. Lowe, on the 9th of Dec. 1858. And a specimen has been lately communicated by Sr. Moniz, which he captured under the chippings of Spanish chestnut-trees at Santa Anna, in the north of Madeira.

## Genus HOLOPARAMECUS.

Curtis, Ent. Mag. i. 186 (1833).

*Holoparamecus Kunzei*, Aubé.

*H. elongato-oblongus*, angustus, rufo-testaceus, subnitidus et subtiliter pubescens; prothorace ad latera minus curvato, postice paulo angustato et in medio inæqualiter transverso-signato; elythro singulo stria suturali recta impresso; antennis 10-articulatis.

Long. corp. lin.  $\frac{2}{3}$ .

*Habitat* Maderam australem, a Dom. Bewicke prope urbem Funchalensem captus.

*Calyptobium Kunzei*, Aubé, Ann. de la Soc. Ent. de France (2<sup>ième</sup> série), i. (1843).

*H. larger* and more linear than the *H. niger*, the elytra being much longer in proportion; also of a paler hue, being uniformly rufo-testaceous; much less shining, and scarcely perceptibly punctured, even beneath the microscope, but more evidently pubescent. *Head* narrower than the anterior part of the *prothorax*, which is less curved at the sides, and not so suddenly narrowed behind, as is the case in the *H. niger*, and with its posterior region transversely and unevenly impressed,—the impressed band being narrower in proportion than in that insect, and therefore not continued so close towards the hinder angles (which, in like manner, have their extreme lateral edge a little thickened, but with no tendency to be produced backwards on the surface of the pronotum), and being more evidently terminated on each side by a very short longitudinal costa, and interrupted by a still more perceptible one (though equally short) in the centre,—which medial one merges into an obscure dorsal channel in front of the transverse impression, deep on the disk, but evanescent before and behind. *Elytra* more produced, or lengthened, posteriorly than in the *H. niger*, and with the sutural stria on each less curved,—being almost quite parallel with the suture. *Antennæ*, which are composed of ten joints only (instead of eleven, as in the *H. niger*), concolorous with the rest of the surface. *Legs* a shade paler.

The above comparative description will at once point out the distinctions between the present *Holoparamecus* and its Madeiran congener, the *H. niger*. Indeed the structural character of its antennæ, which contain a joint less than those of that insect (the numerical variation of the antennal articulations being one of the peculiarities of the members of this genus), would of itself suffice to separate it; nevertheless, its larger size and many other specific features have been fully recorded in the diagnosis. Although I felt convinced it was the *Calyptobium*



*Kunzei* of Aubé (that species being the only one hitherto recorded in which the antennæ are 10-articulate), I am nevertheless enabled to state this for certain, Dr. Aubé having kindly transmitted to me from Paris, through M. Allard, one of his three original types of that insect, for comparison; with which the Madeiran specimens agree in every respect. Its discovery in Madeira is due to Mr. Bewicke, who captured several examples of it, about a year ago, in his garden at the Palmeira, above Funchal.

GENUS CORTICARIA.

Marsham, Ent. Brit. i. 106 (1802).

*Corticaria pubescens*, Gyll.

*C. elongato-ovata*, fusco-picea, cinereo-pubescens; capite prothoraceque profunde punctatis (punctis maximis), hoc ad latera (præsertim postice) crenulato, fovea postmedia magna profunda rotundata impresso; elytris profunde rugose et dense subseriatim punctatis; antennis pedibusque rufo-ferrugineis, his elongatis.

Long. corp. lin.  $1\frac{1}{4}$ .

*Habitat* Maderam australem, a Dom. Bewicke detecta.

*Latridius pubescens*, Illiger, in litt.

—— —, Gyll., Ins. Suec. iv. 125 (1827).

*Corticaria pubescens*, Steph., Ill. Brit. Ent. iii. 106 (1830).

—— — Redt., Fauna Austr. 208 (1849).

*C. elongate-ovate*, brownish-piceous, with a more or less subrufescent tinge, and clothed with long decumbent cinereous pile. *Head* and *prothorax* very deeply punctured, the punctures being extremely large, but (especially on the former) not very dense: the *latter* with the edges a good deal rounded, and crenulated (particularly posteriorly); and with a very large, rounded and deeply impressed fovea on the centre of the hinder disk. *Elytra* deeply, thickly, and rugosely subseriate-punctate (the punctures having only a tendency to being disposed in longitudinal rows). *Limbs* rufo-ferruginous; the *legs* longer than in the generality of the *Corticariæ*.

A single example of the common European *C. pubescens* was detected by Mr. Bewicke, about a year ago, near Funchal. It may be readily known from the rest of the Madeiran *Corticariæ* by its comparatively large size, brownish-ferruginous hue, and densely pubescent surface, by the immense and very deep punctures of its head and prothorax, by the somewhat close sculpture of its elytra, and the length of its legs. It has probably been imported into the island from more northern latitudes.

*Corticaria inconspicua*, n. sp.

*C. elongata*, rufo-ferruginea, subdepressa; capite prothoraceque pro-

funde et sat crebre punctatis, hoc ad latera (præsertim postice) crenulato, fovea postmedia profunda rotundata impresso; elytris leviter sed rugulose striato-punctatis; antennis pedibusque paulo pallidioribus.

Long. corp. lin.  $\frac{1}{2}$ — $\frac{2}{3}$ .

*Habitat* Maderam, in horto Leacociano prope Funchal a meipso detecta; neonem ad S. Antonio da Serra deprehensit Dom. Bewicke.

*C.* similar to the *C. rotulicollis* [*Ins. Mad.* 184], but smaller, just perceptibly less convex, and of a more uniformly rufo-ferruginous hue, the elytra being usually not at all darker than the head and prothorax. *Prothorax* a little less closely punctured than in that insect, with its hinder foveæ perhaps somewhat larger, and with its lateral crenulations not quite so powerful, and less numerous; or, at any rate, with the anterior ones smaller and less evident. *Elytra* not quite so deeply striate-punctate, and the apex of the *antennæ* a trifle paler, or less obscured.

An insignificant little *Corticaria*, appearing at first sight like a depauperated state of the *C. rotulicollis*. It was detected by myself, beneath bones and chippings of wood, in a small out-house in Mr. Leacock's garden at the Quinta de São João, near Funchal; in which locality it was subsequently taken both by Mr. E. Leacock and Mr. Bewicke, the latter of whom likewise captured it, during August 1859, in a hovel at S. Antonio da Serra.

#### Genus METOPHTHALMUS.

Wollaston, *Ins. Mad.* 192 (1854).

##### *Metophtthalmus exiguus*, n. sp.

*M.* forma et sculptura *M. asperato* simillimus, sed minutissimus, omnino rufo-ferrugineus, fronte minus costato, oculo distinctiore et antennarum articulis inter se diversis [sc. tertio ad octavum minutis subglobosis subæqualibus moniliformibus, nono subgloboso (haud poculiformi), et ultimo oblongo (nec oblique truncato)].

Long. corp. lin.  $\frac{1}{2}$ .

*Habitat* Maderam australem: specimen unicum prope urbem Funchalensem æstate 1859 cepit Dom. Bewicke.

*M.* very like in form and sculpture to the *M. asperatus*, except that it is much smaller and of a uniformly ferruginous, or rufo-ferruginous, hue, with its frontal costæ much less evident, or almost obsolete, but with the ocellus better defined; with its prothorax also somewhat less uneven; and with its antennal joints [*vide* the above diagnosis] differently proportioned.

A single specimen of it has been lately detected in Madeira

Proper by Mr. Bewicke, to whose indefatigable researches we are indebted for so many additions to our fauna. He informs me that he found it amongst some "Euphorbia rubbish" in his garden at the Palmeira, in company with the (likewise unique) *Prostheca aspera*, but was not able to obtain another specimen. Its 10-articulated antennæ, and the minutely serrated margins of its head, prothorax, and elytra, in conjunction with the very peculiar construction (and position) of its eyes, at once show it to be a true *Metopthalmus*; nevertheless, in the relative proportions and shape of its antennal joints, it recedes from the *M. asperatus* very considerably. Thus, all the joints from the third to the eighth inclusive are minute, subglobose, and moniliform, being nearly equal throughout; whereas in the *M. asperatus* the fourth is very much longer than the (diminutive) third one; and from thence to the eighth they sensibly decrease in length, and increase a little (though only a very little) in breadth. Then the (biarticulated) club itself is somewhat different, the penultimate joint being almost globose, and the terminal one oblong; whereas in the *M. asperatus* the ninth joint is distinctly poculiform, and the tenth largely truncated, in an oblique direction, internally, causing it to be much acuminate at its inner apex.

Judging both from the description and the figure, I have little doubt that the genus *Bonvouloiria* of Jacquelin Duval [*vide* Genera des Coléop. d'Europe, ii. 245, A.D. 1857-59] is in reality coincident with *Metopthalmus*; for, although M. Duval describes the antennæ as only 9-articulate, still the third joint is so very minute that it might be mistaken for a portion of the second, by which indeed it is also, when in its normal position, somewhat hidden; so that it might be easily overlooked, unless the antenna be flattened out and mounted in Canada Balsam for the microscope. He does not describe any of the oral organs of his insect, except the upper lip and the terminal joint of the maxillary palpi; but these so entirely correspond with those of the *M. asperatus*, whilst the external details to which he calls attention are so exactly in accordance with those observed by myself in Madeira, that I am the more inclined to suspect that he was mistaken as to the precise number of its antennal joints. Moreover, the *habit* of the *Bonvouloiria niveicollis* is precisely that of the *Metopthalmus*; for he expressly notices the curious *chalky substance* ("la substance blanche crétacée") with which the under sides, as well as a portion of the head and prothorax, of his specimens (which he captured near Montpellier) were covered,—a peculiarity which I pointed out in my Madeiran Catalogue in 1857, where I stated that I believed this white powdery matter to be the particles of

a minute Mould or *Thallus* (the *Rhinotrichum Bloxhami* of Berkeley), on which I detected the *M. asperatus* apparently feeding, amongst the rotten tinder-like wood of an old Til-tree. Whether either of the Madeiran species is identical with *M. Jacquelin Duval's*, I will not undertake to say; but, from one or two points in his diagnosis, I am inclined to believe that they are both distinct from it.

#### Genus MONOTOMA.

Herbst, Natursyst. v. (1793).

*Monotoma quadricollis*, Aubé.

*M. sublinearis*, picea, opaca, pilis pallidioribus brevibus vestita; oculis paulo ante basin capitis sitis; capite prothoraceque subrugulosis sed minus distincte punctatis, hoc elongato-quadrato angulis anticis paulo incrassatis sed vix spiniformibus; elytris leviter striato-punctatis et seriatim pilosis, ferrugineis, regione scutellari obscuriore; antennis pedibusque rufo-ferrugineis.

Long. corp. lin.  $1-1\frac{1}{8}$ .

*Habitat* Maderam, in horto Bewickiano prope Funchal sub foliis marcidis abundans.

*Monotoma quadricollis*, Aubé, Ann. de la Soc. Ent. de France, vi. 465. pl. 17. f. 7 (1837).

— — Redt., Fauna Austr. 203 (1849).

*M.* rather narrow and linear, piceous, opaque, and clothed (though not very densely) with a short, rigid, decumbent, paler pile. *Head* and *prothorax* punctured and slightly roughened, the punctures, however, not being so deep or well-defined as in either the *M. spinifera* or *congener*: the *former* rather longer, or less truncated posteriorly, than in the *M. congener*, and with the *eyes* a little further removed from the hinder rim (which is not quite so narrow and prominent as in that insect): the *latter* elongato-quadrate, being of nearly equal breadth throughout, and with the sides almost straight; with the lateral edges minutely crenulated; with the angles not produced,—though the anterior ones are somewhat thickened, or enlarged, and the posterior ones minutely prominent; and with indications of a small obsolete fovea on either side of the disk behind. *Elytra* ferruginous, but more or less obscured about the region of the scutellum, faintly striate-punctate, and (as in the following species) with the pubescence arranged in very distinct longitudinal rows. *Limbs* bright rufo-ferruginous.

Detected abundantly by Mr. Bewicke and myself, in company with the *M. spinifera*, beneath dead leaves and vegetable refuse, in his garden at the Palmeira, above Funchal, during December of 1858; as also, subsequently, at the Praia Formosa. Its

distinctions from the *M. congener*, to which it appears at first sight much allied, may be readily gathered from the description; nevertheless, apart from minor characters, its somewhat narrower and more linear outline, in conjunction with its paler elytra, more pubescent and less deeply sculptured surface, and its elongate-quadrato prothorax, will at once separate it from that insect. It seems to differ in no respect, so far as I can perceive, from the European *M. quadricollis*.

*Monotoma quadrifoveolata*, Aubé.

*M. rufo-ferruginea*, subopaca, pilis pallidioribus brevibus sat dense vestita; capite postice subquadrato; oculis parvulis, longe ante basin capitis sitis; prothorace quadrato, ad latera valde incrassato-marginato recto, sulcis duobus maximis interruptis (foveas quatuor efficientibus) longitudinaliter impresso; elytris leviter striato-punctatis et seriatim pilosis.

Long. corp. lin.  $\frac{7}{8}$ -1.

*Habitat* Maderam australem, sub ossibus desiccatis et ligno in horto Leacociano prope Funchal sat vulgaris.

*Monotoma 4-foveolata*, Aubé, Ann. de la Soc. Ent. de France, vi. 468, pl. 17. f. 9 (1837).

— —, Redt., Fauna Austr. 203 (1849).

*M.* pale reddish-ferruginous, nearly opaque, and densely clothed with a short, rigid, decumbent, paler pile. *Head* and *prothorax* apparently not much punctured (if indeed at all—the surface being hidden by the pubescence): the *former* rather large, and square behind, with the *eyes* small, black, and situated at a considerable distance from the extreme base: the *latter* subquadrato, being quite straight at the sides, and of almost equal breadth before and behind; with the lateral edges strongly margined or thickened, but only appearing minutely crenulated beneath a high magnifying power; with the angles not at all produced; and with a very broad and deep longitudinal channel on either side of the disk, each of which is a little interrupted transversely in the centre,—so as to constitute, in all, four foveæ. *Elytra* faintly striate-punctate, and with the pubescence arranged in longitudinal rows down each of the series of punctures. *Limbs* (especially the *legs*) a shade paler, or more rufescent, than the rest of the surface.

The *M. 4-foveolata* may be at once known from its three Madeiran allies by (*inter alia*) its pale-ferruginous hue and very pubescent surface, by its comparatively large subquadrato head and small eyes, and by the four deep foveæ and unproduced angles of its almost square and laterally margined prothorax. It was detected by myself, in December 1858, beneath bones and chippings of wood, in a small out-house in Mr. Leacock's

garden at Quinta de São João, near Funchal,—a locality in which it was afterwards abundantly captured both by Mr. E. Leacock and Mr. Bewicke. It agrees precisely with specimens in my possession from France and Austria—unless it be, perhaps, that the Madeiran examples are, on the average, just perceptibly smaller.

Fam. *Mycetophagidæ*.

Genus MYRMECOXENUS.

Chevrolat, in *Silb. Rev. Ent.* iii. 267 [script. *Myrmechixenus*] (1835).

The genus *Myrmecoxenus* is usually assigned to the *Lathriadiæ*, to several of the members of which (especially *Corticaria*) it has a great outward resemblance; nevertheless its quadriarticulate feet, and the other details of its structure, seem to me to point to the *Mycetophagidæ* as its more correct location, and to such groups as *Microchondrus* (i. e. *Symbiotes*) and *Mycetæa* as perhaps its nearest allies. Indeed, M. Jacquelin-Duval has already placed it [*vide Gen. des Coléopt. d'Europe*, ii. 223] in juxtaposition with these genera, having, however, formed a separate family (the *Myceteïdes*) for their reception, distinct from the *Mycetophagidæ* proper,—a step which it might perhaps be desirable to adopt, though it is scarcely necessary to do so in a small local fauna. I may just remark that, in spite of its great external resemblance to the *Corticariæ*, it may be known, *inter alia*, by its less abruptly clubbed antennæ (the four apical joints of which, instead of only three, are gradually, though distinctly, thickened), and by its quadri- (instead of tri-)articulate feet,—of which, moreover, the hinder ones have their basal joint much elongated.

*Myrmecoxenus picinus*, Aubé.

*M. rufo-piceus*, subnitidus, parce cinereo-pubescentis, ubique dense et sat fortiter punctatus; prothorace transverso-subquadrato, postice vix attenuato; elytris paulo obscurioribus; antennis pedibusque testaceis.

Long. corp. lin. vix 1.

*Habitat* Maderam australem, a Dom. Bewicke supra urbem Funchalensem captus.

*Myrmecoxenus picinus*, Aubé, *Ann. de la Soc. Ent. de France* (2ième série), viii. 330 (1850).

*M. rufo-piceus*, slightly shining, sparsely clothed with decumbent cinereous pile, and with the entire upper surface closely, regularly, and rather deeply punctured,—the punctures on the head and prothorax being just perceptibly less dense and deep

than those on the elytra. *Prothorax* transverse-quadrate (being very slightly narrowed behind), and free from all inequalities and depressions. *Elytra* a little shorter than the abdomen (which is black, and has the pygidium partially exposed), and a shade darker in colour than the head and prothorax; the punctures without the slightest tendency to be disposed in longitudinal rows. *Limbs* testaceous.

I have but little hesitation in referring the present insect to the *M. picinus* of Aubé (from Corsica and Algeria), with the description of which it agrees exactly. It is of about the size, and nearly the outline, of the European *M. vaporariorum*; nevertheless, it is darker than that species (being rufo-piceous instead of testaceous, and with its elytra almost piceous), more shining, rather less pubescent, and with its punctation very much larger and deeper. A single specimen of it has been captured by Mr. Bewicke, in his garden at the Palmeira, above Funchal.

Fam. Dermestidæ.

Genus ATTAGENUS.

Latreille, Gen. Crust. et Ins. ii. 32 (1802).

*Attagenus Schæfferi*, Herbst.

*A. ovalis*, nigro-piceus, supra nigro- et (saltem intra angulos prothoracis posticos) subflavescenti-pubescentis, infra subcinereo-flavescenti-pubescentis; elytris plus minus distincte picescentioribus; antennarum basi pedibusque ferrugineis.

Long. corp. lin.  $1\frac{3}{4}$ -2.

*Mas*, antennarum articulo ultimo longissimo, subarcuato, ensiformi.

*Habitat* urbem Funchalensem, in domibus mercatorumque repositoriis a Dom. Moniz æstate 1858 detectus.

*Megatoma Schæfferi*, Hbst., Käf. iv. 93.

*Dermestes Schæfferi*, Gyll., Ins. Suec. i. 152 (1808).

*Attagenus Schæfferi*, Erichs., Nat. der Ins. Deutschl. iii. 440 (1848).

*A.* similar to the *A. megatoma*, but a little larger and more piceous (especially the elytra, which are sometimes subrufescent), and with a slight admixture of yellowish-cinereous (along with the black) pile on the anterior part of its upper surface,—particularly along the hinder margin of the prothorax, and occasionally also towards the extreme base of the elytra. The males with the ultimate joint of their antennæ even longer still than in the *A. megatoma*, and slightly bent, or ensiform.

Several specimens of this insect, which approaches very closely, at first sight, to the *A. megatoma*, but which (even though not according precisely with Erichson's description) I believe to be correctly referred to the European *A. Schæfferi* (and which, I

should add, has been compared by my friend Dr. Schaum with examples of that species in the Museum at Berlin), were captured by Senhôr Moniz, in the houses and shops of Funchal, during the summer of 1858; and I may state that I have myself taken it in similar positions in the Canary Islands.

[To be continued.]

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XXX.—On the Tribe Colletieæ, with some Observations on the Structure of the Seed in the Family of the Rhamnaceæ. By JOHN MIERS, F.R.S., F.L.S. &c.

[Continued from p. 216.]

## 2. NOTOPHÆNA.

I propose this genus for a separate group, with flowers distinguished by the same peculiarity as those of *Colletia*—the total absence of petals,—but differing from the latter genus in its habit, its copious foliage, and in the form of its disk, which resembles that of *Discaria*. It is also characterized by the peculiar feature before alluded to—the union of the base of the opposite stipules, which gives an appearance of an articulation at every node,—a peculiarity often seen also in the middle of the spines when they are foliiferous. The type of the genus is the *Colletia serratifolia* of Ventenat, from Chile; the other species are mostly from the southern parts of the same country, and one is from New Zealand: hence the generic name, from *νότος*, *auster*; *φαίνομαι*, *appareo*. They sometimes form very leafy shrubs, at other times low decumbent bushes, bare of spines. Here we generally see a spineless branchlet issuing from below each spine, and bearing both leaves and flowers, which quite confirms the supposition that the scaly tubercle seen in *Colletia* and other genera is only a very abbreviated or suppressed branchlet.

NOTOPHÆNA, gen. nov.;—*Calyx* urceolato-campanulatus, usque ad medium 4–5-fidus, laciniis reflexis, intus carina prominula calloque apicali notatis, æstivatione valvatis, imo demum circumscissus. *Petala* nulla. *Stamina* 4–5, tubo calycino inter lacinias inserta; *filamenta* filiformia, laciniis breviora, erecta; *antheræ* ovatæ, 2-lobæ, 2-loculares, loculis rima longitudinali antice hiantibus. *Discus* pateriformis, hypogynus, imo tubi adnatus, margine brevi, libero, crenato. *Ovarium* superum, globosum, sæpe pilosum, 3-sulcatum, 3-loculare; *ovula* in loculis solitaria, erecta. *Stylus* brevis, calycis tubum æquans. *Stigma* obtusum, breviter 3-lobum. *Fructus* siccus, subglobosus, cupula calycina discoque suffultus et adnatus, in cocos 3 resiliens; istis seminibusque ut in *Colletia*.